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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,519	09/29/2003	Takafumi Kurosawa	SHD-103-USAP	9109

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EXAMINER

JONES, DWAYNE C

ART UNIT PAPER NUMBER

1614

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/671,519

Applicant(s)

KUROSAWA ET AL.

Examiner

Dwayne C. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27DEC2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-7 are pending.
2. Claims 1-7 are rejected.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Arguments

4. Applicant's arguments filed December 27, 2005 have been fully considered but they are not persuasive. Applicants present the following arguments. First, applicants allege that Lentini et al. of WO 00/33803 does not disclose octyl methoxycinnamate in combination with polyoxyethylene methylglycoside. Second, applicants submit that there is no disclosure in the prior art reference of Katsuhiro of JP 01165517 regarding the presence of octyl methoxycinnamate. Third, applicants argue that Katsuhiro of JP 01165517 does not teach of a combination of zinc oxide and polyoxyethylene methylglycoside and/or polyoxypropylene methylglycoside. Fourth, since applicants have now amended their claims to state how the well known sunscreen agents of zinc oxide and titanium dioxide are treated in a hydrophobic manner, such with a fluorinated polymer, the prior art reference of Lentini et al. of WO 00/33803 allegedly does teach of

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treating the sunscreen agents of zinc oxide and titanium dioxide in a hydrophobic manner.

5. First, applicants allege that Lentini et al. of WO 00/33803 does not disclose octyl methoxycinnamate in combination with polyoxyethylene methylglycoside. This allegation is not disputed. However, the rejection of record is not over Lentini et al. by itself but rather Lentini et al. of WO 00/33803 in view of Katsuhiro of JP 01165517.

Accordingly, the rejection of record does in fact teach and list the cited sections that teach octyl methoxycinnamate is a known sunscreen agent in Lentini et al. as well as polyoxyethylene methylglycoside is a known sunscreen agent in Katsuhiro.

6. Second, applicants submit that there is no disclosure in the prior art reference of Katsuhiro of JP 01165517 regarding the presence of octyl methoxycinnamate. Although it is true that Katsuhiro is silent to the presence of the well known sunscreen agent of octyl methoxycinnamate, Katsuhiro et al. teach of cosmetic agents that are also used to sustain the effects or prevent the damaging effects of ultraviolet rays of the skin with titanium dioxide along with polyoxyethylene methylglycoside. In addition, the instant claims were not rejected over Katsuhiro et al. alone. The rejection of record is under 35 U.S.C. 103(a) as being unpatentable over Lentini et al. of WO 00/33803 in view of Katsuhiro of JP 01165517.

7. Third, applicants argue that Katsuhiro of JP 01165517 does not teach of a combination of zinc oxide and polyoxyethylene methylglycoside and/or polyoxypropylene methylglycoside. This argument is not disputed. However, the fact remains that Katsuhiro is directed to a cosmetic composition for protecting the skin from

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ultraviolet rays with the combined administration of titanium dioxide and polyoxyethylene methylglycoside. When these Katsuhiko teachings are combined, as they were, with the disclosure of Lentini et al., which does teach of the sunscreen agent of octyl methoxycinnamate and other "sunscreens such as zinc oxide and titanium dioxide" (as specifically recited by Lentini et al. on page 5, lines 22-23 and lines 10-11, respectively), the instant claims are rendered obvious because both of these prior art references are directed to the very same use, namely topical sunscreen preparations for the skin, one having ordinary skill in the art would have been motivated to combine sunscreen components that are already known in art to be used to treat the very same condition, namely sunburn, see *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

8. Fourth, since applicants have now amended their claims to state how the well known sunscreen agents of zinc oxide and titanium dioxide are treated in a hydrophobic manner, such with a fluorinated polymer, the prior art reference of Lentini et al. of WO 00/33803 allegedly does teach of treating the sunscreen agents of zinc oxide and titanium dioxide in a hydrophobic manner. Applicants do admit that Lentini et al. do in fact teach of the presence of a fluorinated polymer that is incorporated into the sunscreen composition. Lentini et al. also disclose, "that the SPF value of a sunscreen composition can be increased when a fluoro-resin polymer . . . is combined with a sunscreen agent", (see page 3, lines 10-12). Lentini et al. teach to the skilled artisan, "[t]he fluoro-resins can be any fluorinated polymer", (see page 4, line 3) and even state that "[t]he fluoro-resin is incorporated into an oil component", (see page 4, line 12) as

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well as teaching that "the fluoro-resin can be pre-dispersed in a hydrocarbon oil", (see page 4, line 28). These teachings specifically provide and guide the skilled artisan to use "any fluorinated polymer" along with a known sunscreen agent in order to increase the SPF of the sunscreen composition. Moreover, Lentini et al. even state that the fluorinated polymer is incorporated or treated with "an oil", "a hydrocarbon oil", or even "a vehicle that is hydrophobic", which provides the skilled artisan not only with explicit teaching of combining or treating any fluorinated polymer with a hydrophobic manner, or hydrophobic medium as specifically disclosed by Lentini et al. Accordingly, the prior art reference of Lentini et al. provides the skilled artisan with teachings and motivations to use a fluorinated polymer along with the sunscreen agent as well as providing explicit and clear support and suggestions to have this fluorinated polymer occur in a hydrophobic vehicle or environment. For these reasons, the instantly claimed subject matter is still found obvious under 35 U.S.C. 103(a) as being unpatentable over Lentini et al. of WO 00/33803 in view of Katsuhiko of JP 01165517.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. The rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Lentini et al. of WO 00/33803 in view of Katsuhiro of JP 01165517 is maintained and repeated for both the above stated and reasons of record. Lentini et al. teach of the preparation of sunscreen compositions that feel better on the skin and are less irritating than typical sunscreens because the enhanced photoprotection is not achieved by using greater quantities of the sunscreen agent, (see page 1, lines 5-10). "More preferably, the organic sunscreen is octyl methoxycinnamate" and other "sunscreens such as zinc oxide and titanium dioxide" (as specifically recited by Lentini et al. on page 5, lines 22-

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23 and lines 10-11, respectively). It is well known in the art that titanium dioxide is the oxide of titanium metal which requires the stoichiometric presence of 2 moles of oxygen to balance the cationic charge (+4) of titanium, and so the skilled artisan would easily recognize the titanium dioxide is the oxide of titanium metal. In addition, Lentini et al. also disclose of the presence of a variety of sunscreen agents, (see pages 5 and 6). The prior art reference of Katsuhiko et al. teach of cosmetic agents that are also used to sustain the effects or prevent the damaging effects of ultraviolet rays of the skin with titanium dioxide along with polyoxyethylene methylglycoside, (see translated Patent Abstract of JP 01165517). In addition, it is well within the purview of the skilled artisan to utilize homologues of a compound, such as polyoxyethylene methylglycoside, which would obviously embrace the homologue of polyoxypropylene methylglycoside. "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . . [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Since both of these prior art references are directed to the very same use, namely topical sunscreen preparations for the skin, one having ordinary skill in the art would have been motivated to combine sunscreen components that are already known in the prior art to be used to treat the very same condition, namely sunburn.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. C. Jones whose telephone number is (571) 272-0578. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, and Fridays from 8:30 am to 6:00 pm.

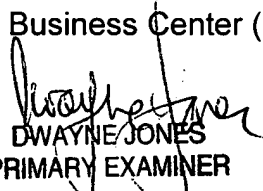
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, may be reached at (571) 272-0951. The official fax No. for correspondence is (571)-273-8300.

Also, please note that U.S. patents and U.S. patent application publications are no longer supplied with Office actions. Accordingly, the cited U.S. patents and patent

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application publications are available for download via the Office's PAIR, see <http://pair-direct.uspto.gov>. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 1-866-217-9197 (toll free).


DWAYNE JONES
PRIMARY EXAMINER

Tech. Ctr. 1614
February 3, 2006